AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1   1. (Currently amended) A method for replacing an attachment to an email

2 message with a reference to a location of the attachment, comprising:

3   receiving the email message;

4   examining the email message to determine if the email message includes

5 an attachment; and

6   if the email message includes the attachment,

7   storing the attachment at a location on a communication

8   network from which the attachment can be retrieved,

9   modifying the email message by replacing the attachment

10   with a reference specifying the location of the attachment on the

11   communication network,

12   sending the modified email message to a recipient of the

13   email message,

14   providing proof of receipt of the contents of the attachment,

15   wherein providing proof of receipt involves:

16   delivering an encrypted version of the

17   attachment,

18   receiving a receipt for the encrypted version

19   of the attachment, wherein the receipt includes a

20   hash of the encrypted attachment, and

21	sending the decryption key for the
22	attachment, and
23	deleting the attachment from the location on the
24	communication network after one of:
25	receiving a notification that all recipients of
26	the email message have retrieved the attachment,
27	and
28	receiving a notification that all recipients of
29	the email message have deleted the email message.

1   2. (Original) The method of claim 1, further comprising:

2   receiving the modified email message at the recipient; and

3   using the reference specifying the location of the attachment to retrieve the

4 attachment across the communication network.

1   3. (Original) The method of claim 2, wherein retrieving the attachment

2 includes authenticating the recipient to a computer system upon which the

3 attachment is stored.

1   4. (Original) The method of claim 1, wherein receiving the email message

2 includes receiving the email message at one of,

3   an application residing on a computer system belonging to a sender of the

4 email message;

5   an email server through which the email message is sent;

6   a firewall that protects at least one trusted computer system from

7 communications across the communication network; and

8   a gateway that converts the email message from a first format to a second

9 format.

1   5. (Original) The method of claim 1, further comprising allowing the

2   attachment to be updated at the location on the communication network.

1   6. (Previously presented) The method of claim 1, further comprising

2   deleting the attachment from the location on the communication network after at

3   least one of:

4   an expiration of a time period;

5   sending a notification to recipients of the email message that the

6   attachment is to be deleted;

7   receiving a command to delete the attachment from a sender of the email

8   message; and

·9   storing the attachment to archival storage.

1   7. (Original) The method of claim 1, wherein the communication network

2   includes at least one of:

3   a computer network; and

4   a telephone network.

1   8. (Original) The method of claim 1, wherein if the email message

2   includes the attachment, the method further comprises:

3   asking a sender of the email message whether to replace the attachment

4   with the reference specifying the location of the attachment; and

5   replacing the attachment only if the sender agrees to replace the

6   attachment.

1   9. (Original) The method of claim 1, wherein the attachment is a file.

1   10. (Original) The method of claim 1, wherein the reference specifying the

2   location of the attachment includes a uniform resource locator (URL).

1   11. (Currently amended) A computer-readable storage medium storing

2   instructions that when executed by a computer cause the computer to perform a

3   method for replacing an attachment to an email message with a reference to a

4   location of the attachment, the method comprising:

5   receiving the email message;

6   examining the email message to determine if the email message includes

7   an attachment; and

8   if the email message includes the attachment,

9   storing the attachment at a location on a communication

10   network from which the attachment can be retrieved,

11   modifying the email message by replacing the attachment

12   with a reference specifying the location of the attachment on the

13   communication network,

14   sending the modified email message to a recipient of the

15   email message,

16   providing proof of receipt of the contents of the attachment,

17   wherein providing proof of receipt involves:

18   delivering an encrypted version of the

19   attachment,

20   receiving a receipt for the encrypted version

21   of the attachment, wherein the receipt includes a

22   hash of the encrypted attachment, and

23   sending the decryption key for the

24   attachment, and

25   deleting the attachment from the location on the

26   communication network after one of:

27   receiving a notification that all recipients of

28   the email message have retrieved the attachment,

29   and

30   receiving a notification that all recipients of

31   the email message have deleted the email message.

1   12. (Original) The computer-readable storage medium of claim 11,

2 wherein the method further comprises:

3   receiving the modified email message at the recipient; and

4   using the reference specifying the location of the attachment to retrieve the

5 attachment across the communication network.

1   13. (Original) The computer-readable storage medium of claim 12,

2 wherein retrieving the attachment includes authenticating the recipient to a

3 computer system upon which the attachment is stored.

1   14. (Original) The computer-readable storage medium of claim 11,

2 wherein receiving the email message includes receiving the email message at one

3 of,

4   an application residing on a computer system belonging to a sender of the

5 email message;

6   an email server through which the email message is sent;

7   a firewall that protects at least one trusted computer system from

8 communications across the communication network; and

9   a gateway that converts the email message from a first format to a second

10 format.

1   15. (Original) The computer-readable storage medium of claim 11,

2 wherein the method further comprises allowing the attachment to be updated at

3 the location on the communication network.

1   16. (Previously presented) The computer-readable storage medium of

2 claim 11, wherein the method further comprises deleting the attachment from the

3 location on the communication network after at least one of:

4   an expiration of a time period;

5   sending a notification to recipients of the email message that the

6 attachment is to be deleted;

7   receiving a command to delete the attachment from a sender of the email

8 message; and

9   storing the attachment to archival storage.

1   17. (Original) The computer-readable storage medium of claim 11,

2 wherein the communication network includes at least one of:

3   a computer network; and

4   a telephone network.

1   18. (Original) The computer-readable storage medium of claim 11,

2 wherein if the email message includes the attachment, the method further

3 comprises:

4   asking a sender of the email message whether to replace the attachment

5 with the reference specifying the location of the attachment; and

6   replacing the attachment only if the sender agrees to replace the

7 attachment.

1   19. (Original) The computer-readable storage medium of claim 11,
2   wherein the attachment is a file.

1   20. (Original) The computer-readable storage medium of claim 11,
2   wherein the reference specifying the location of the attachment includes a uniform
3   resource locator (URL).

1   21. (Currently amended) An apparatus that replaces an attachment to an
2   email message with a reference to a location of the attachment, comprising:
3   an examination mechanism that examines the email message to determine
4   if the email message includes an attachment;
5   a replacement mechanism, wherein if the email message includes the
6   attachment the replacement mechanism is configured to,
7   store the attachment at a location on a communication
8   network from which the attachment can be retrieved,
9   modify the email message by replacing the attachment with
10   a reference specifying the location of the attachment on the
11   communication network,
12   provide proof of receipt of the contents of the attachment,
13   wherein providing proof of receipt involves:
14   delivering an encrypted version of the
15   attachment,
16   receiving a receipt for the encrypted version
17   of the attachment, wherein the receipt includes a
18   hash of the encrypted attachment, and
19   sending the decryption key for the
20   attachment, and

21   send the modified email message to a recipient of the email

22   message; and

23   a deletion mechanism that is configured to delete the attachment from the

24 location on the communication network after one of:

25   receiving a notification that all recipients of the email

26   message have retrieved the attachment, and

27   receiving a notification that all recipients of the email

28   message have deleted the email message.

1   22. (Original) The apparatus of claim 21, further comprising:

2   a second receiving mechanism at the recipient that is configured to receive

3 the modified email message; and

4   a retrieval mechanism at the recipient that is configured to use the

5 reference specifying the location of the attachment to retrieve the attachment

6 across the communication network.

1   23. (Original) The apparatus of claim 22, wherein the retrieval mechanism

2 is configured to authenticate the recipient to a computer system upon which the

3 attachment is stored.

1   24. (Original) The apparatus of claim 21, wherein the replacement

2 mechanism is located on one of,

3   an application residing on a computer system belonging to a sender of the

4 email message;

5   an email server through which the email message is sent;

6   a firewall that protects at least one trusted computer system from

7 communications across the communication network; and

8   a gateway that converts the email message from a first format to a second

9   format.

1   25. (Original) The apparatus of claim 21, further comprising an updating

2   mechanism that is configured to allow the attachment to be updated at the location

3   on the communication network.

1   26. (Previously presented) The apparatus of claim 21, wherein the deletion

2   mechanism is further configured to delete the attachment from the location on the

3   communication network after at least one of:

4   an expiration of a time period;

5   sending a notification to recipients of the email message that the

6   attachment is to be deleted;

7   receiving a command to delete the attachment from a sender of the email

8   message; and

9   storing the attachment to archival storage.

1   27. (Original) The apparatus of claim 21, wherein the communication

2   network includes at least one of:

3   a computer network; and

4   a telephone network.

1   28. (Original) The apparatus of claim 21, wherein if the email message

2   includes the attachment, the replacement mechanism is configured to:

3   ask a sender of the email message whether to replace the attachment with

4   the reference specifying the location of the attachment; and to

5   replace the attachment only if the sender agrees to replace the attachment.

1   29. (Original) The apparatus of claim 21, wherein the attachment is a file.

1   30. (Original) The apparatus of claim 21, wherein the reference specifying
2   the location of the attachment includes a uniform resource locator (URL).